WHAT IS CLAIMED IS:

1. A method for reducing odor, said method comprising:

forming a coordination complex between a transition metal and a polydentate compound; and

contacting said coordination complex with an odorous compound, said transition metal providing one or more active sites for capturing said odorous compound.

2. A method as defined in claim 1, wherein said transition metal is selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, zinc, silver, gold, and combinations thereof.

3. A method as defined in claim 1, wherein said polydentate compound is water-soluble.

4. A method as defined in claim 1, wherein said polydentate compound contains positively charged ligands.

5. A method as defined in claim 1, wherein said polydentate compound contains one or more primary amines, secondary amines, tertiary amines, or combinations thereof.

6. A method as defined in claim 1, wherein said polydentate compound is a polyalkylimine.

7. A method as defined in claim 6, wherein said polydentate compound is polyethyleneimine, polypropyleneimine, or a dendrimer thereof.

8. A method as defined in claim 1, further comprising crosslinking said polydentate compound.

9. A method as defined in claim 8, wherein a crosslinking agent facilitates said crosslinking of said polydentate compound.

10. A method as defined in claim 9, wherein said crosslinking agent is selected from the group consisting of polyhydric alcohols, polyaziridines, epoxies, haloepoxies, polyaldehydes, polyisocyanates, and combinations thereof.

11. A method as defined in claim 10, wherein said crosslinking agent is an epoxy that contains at least two epoxide groups.

12. A method as defined in claim 10, wherein said crosslinking agent is epichlorohydrin.

13. A method as defined in claim 1, further comprising combining high-surface area particles with said transition metal and said polydentate compound, said particles acting as a carrier for said coordination complex.

14. A method as defined in claim 13, wherein said particles are formed from silica, alumina, or combinations thereof.

15. A method as defined in claim 13, wherein said particles have an average size of less than about 100 nanometers and a surface area of from about 50 to about 1000 square meters per gram.

16. A method as defined in claim 13, wherein said particles have a negative zeta potential.

17. A method as defined in claim 1, further comprising applying said coordination complex to a substrate.

18. A method as defined in claim 17, wherein said substrate comprises a nonwoven, woven, or paper web.

19. A method as defined in claim 17, wherein said substrate comprises cellulosic fibers.

20. A method as defined in claim 19, wherein said coordination complex is chemically grafted to one or more molecules present on said substrate.

21. A method as defined in claim 1, wherein said odorous compound is selected from the group consisting of mercaptans, ammonia, amines, sulfides, ketones, carboxylic acids, aldehydes, terpenoids, hexanol, heptanal, pyridine, and combinations thereof.

22. A method for reducing odor, said method comprising:

forming a coordination complex between a transition metal and a polyalkylimine, said transition metal being selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, zinc, silver, gold, and combinations thereof;

applying said coordination complex to a substrate that comprises cellulosic fibers; and

contacting said substrate with an odorous compound, said transition metal providing one or more active sites for capturing said odorous compound.

23. A method as defined in claim 22, wherein said polyalkylimine is polyethyleneimine, polypropyleneimine, or a dendrimer thereof.

24. A method as defined in claim 22, further comprising crosslinking said polyalkylimine.

25. A method as defined in claim 22, wherein said coordination complex is chemically grafted to one or more molecules present on said cellulosic fibers.

26. A method as defined in claim 22, further comprising combining high-surface area particles with said transition metal and said polyalkylimine, said particles acting as a carrier for said coordination complex.

27. A method as defined in claim 26, wherein said particles are formed from silica, alumina, or combinations thereof.

28. A method as defined in claim 26, wherein said particles have an average size of less than about 100 nanometers and a surface area of from about 50 to about 1000 square meters per gram.

29. A method as defined in claim 22, wherein said odorous compound is selected from the group consisting of mercaptans, ammonia, amines, sulfides, ketones, carboxylic acids, aldehydes, terpenoids, hexanol, heptanal, pyridine, and combinations thereof.

30. A method as defined in claim 22, wherein said polyalkylimine contains positively charged ligands.

31. An odor control composition comprising a coordination complex formed between a transition metal and a polydentate compound, said transition metal being selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, zinc, silver, gold, and combinations thereof, wherein said transition metal provides one or more active sites for capturing an odorous compound.

32. An odor control composition as defined in claim 31, wherein said polydentate compound contains positively charged ligands.

33. An odor control composition as defined in claim 31, wherein said polydentate compound contains one or more primary amines, secondary amines, tertiary amines, or combinations thereof.

34. An odor control composition as defined in claim 31, wherein said polydentate compound is a polyalkylimine.

35. An odor control composition as defined in claim 31, wherein said polydentate compound is polyethyleneimine.

36. An odor control composition as defined in claim 31, wherein said polydentate compound is polypropyleneimine.

37. An odor control composition as defined in claim 31, wherein said polydentate compound is a dendrimer.

38. An odor control composition as defined in claim 37, wherein said polydentate compound is a dendrimer of polyethyleneimine, polypropyleneimine, or combinations thereof.

39. An odor control composition as defined in claim 31, wherein said polydentate compound is crosslinked.

40. An odor control composition as defined in claim 31, further comprising high-surface area particles that act as a carrier for said coordination complex.

41. An odor control composition as defined in claim 40, wherein said particles are formed from silica, alumina, or combinations thereof.

42. An odor control composition as defined in claim 40, wherein said particles have an average size of less than about 100 nanometers and a surface area of from about 50 to about 1000 square meters per gram.

43. A substrate for reducing odor, said substrate being applied with an odor control composition that comprises a coordination complex formed between a transition metal and a polydentate compound, said transition metal being selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper, zinc, silver, gold, and combinations thereof, wherein said transition metal provides one or more actives site for capturing an odorous compound.

44. A substrate as defined in claim 43, wherein said polydentate compound contains positively charged ligands.

45. A substrate as defined in claim 43, wherein said polydentate compound contains one or more primary amines, secondary amines, tertiary amines, or combinations thereof.

46. A substrate as defined in claim 43, wherein said polydentate compound is a polyalkylimine.

47. A substrate as defined in claim 43, wherein said polydentate compound is polyethyleneimine, polypropyleneimine, or a dendrimer thereof.

48. A substrate as defined in claim 43, wherein said polydentate compound

is crosslinked.

49. A substrate as defined in claim 43, wherein said coordination complex is chemically grafted to one or more molecules present on said substrate.

50. A substrate as defined in claim 43, wherein said odor control composition further comprises high-surface area particles that act as a carrier for said coordination complex.

51. A substrate as defined in claim 50, wherein said particles are formed from silica, alumina, or combinations thereof.

52. A substrate as defined in claim 50, wherein said particles have an average size of less than about 100 nanometers and a surface area of from about 50 to about 1000 square meters per gram.

53. A substrate as defined in claim 43, wherein the substrate comprises a nonwoven, woven, or paper web.

54. A substrate as defined in claim 43, wherein the substrate comprises cellulosic fibers.

55. A substrate as defined in claim 43, wherein the solids add-on level of said odor control composition is from about 0.001% to about 20%.

56. An absorbent article that comprises the substrate of claim 43.

57. An absorbent article as defined in claim 56, further comprising at least one liquid-transmissive layer and a liquid-absorbent core, wherein said substrate forms at least a portion of said liquid-transmissive layer, said liquid-absorbent core, or combinations thereof.

58. An absorbent article as defined in claim 57, wherein the absorbent article includes a liquid-transmissive liner, a liquid-transmissive surge layer, a liquid-absorbent core, and a vapor-permeable, liquid-impermeable outer cover, said substrate forming at least a portion of said liner, said surge layer, said absorbent core, said outer cover, or combinations thereof.

59. A paper product that comprises the substrate of claim 43.

60. A facemask that comprises the substrate of claim 43.